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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|------------------------------------|----------------------|---------------------|------------------|
| 10/647,540 | 08/26/2003 | Milind R. Naphade | YOR920030316US1 | 2284 |
| | 7590 09/16/200 ELLECTUAL PROPEI | EXAMINER | | |
| 8321 OLD COURTHOUSE ROAD | | | LIEW, ALEX KOK SOON | |
| | SUITE 200 VIENNA, VA 22182-3817 | | ART UNIT | PAPER NUMBER |
| | | | 2624 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 09/16/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | |
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| | 10/647,540 | NAPHADE ET AL. | | |
| Office Action Summary | Examiner | Art Unit | | |
| | ALEX LIEW | 2624 | | |
| The MAILING DATE of this communication a Period for Reply | ppears on the cover sheet with th | e correspondence address | | |
| A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATI 1.136(a). In no event, however, may a reply be od will apply and will expire SIX (6) MONTHS fr cute, cause the application to become ABANDO | ON. e timely filed om the mailing date of this communication. NED (35 U.S.C. § 133). | | |
| Status | | | | |
| 1) ☐ Responsive to communication(s) filed on 20 2a) ☐ This action is FINAL . 2b) ☐ TI 3) ☐ Since this application is in condition for allow closed in accordance with the practice unde | nis action is non-final. vance except for formal matters, p | | | |
| Disposition of Claims | | | | |
| 4) ☐ Claim(s) 1-4,6-13 and 15-25 is/are pending 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4,6-13 and 15-25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and | rawn from consideration. | | | |
| 9)☐ The specification is objected to by the Exami | ner. | | | |
| 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the | ccepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is | See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d). | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summ: Paper No(s)/Mail 5) Notice of Informa 6) Other: | | | |

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1. The amendment filed on 5/20/08 is entered and made of record.

2. Response to Applicant's Arguments:

On page 11, the applicant stated: "Nicholson does not teach or suggest any descriptor at all, let alone propagating any descriptor to another content granularity without prior regarding that descriptor at the second content granularity." The examiner agrees and withdraws rejection.

In an updated search, the examiner found, Paek (WO 00/28467) and Liu (US pat no 6,970,860), which the combination of both references disclosed the claimed invention. Paek discloses a propagation device that propagates the first descriptor to a second content granularity that is finer than the first content granularity, and wherein the descriptor propagation device propagates the first descriptor without prior data regarding the first descriptor (see figures 1b, 'photo,' which is a descriptor, is the first content granularity and 'person A' and 'person B,' which are also descriptors, are the second content granularities, the arrows pointing from '03' to '01' and '02' are read as propagation, in figures 1a, the descriptor are labeled without using a hierarchy, which reads on 'without prior data', hierarchy is not use until figure 1b). Paek does not disclose a descriptor acceptance device that accepts a first descriptor associated with a first content granularity. Liu discloses a descriptor acceptance device that accepts a first descriptor associated with a first content granularity (figure 2, element 158, accepts descriptors and figure 7 shows steps of how images are annotated, S706, S708, there are a hierarchy, column 6, lines 30-37, the first level of granularity is read as the first

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granularity). One skilled in the art would include a descriptor acceptance device because to be able to accept and also modify descriptors that are already in the image content, to provide more accurate description of the image content (see Liu abstract).

DETAILED ACTION

Claim Rejections - 35 USC § 101

- 1. 35 U.S.C. 101 reads as follows:
 - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- 2. Claims 17-20 are rejected under 35 U.S.C. 101 because in the preambles "a signal-bearing medium tangibly" of the claimed invention is directed to non-statutory subject matter.
- 3. Claims 21-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 21-23 are drawn to functional descriptive material NOT claimed as residing on a computer readable medium.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3, 8, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paek '467 in view of Liu '860.

With regards to claim 1, Paek discloses a propagation device that propagates the first descriptor to a second content granularity that is finer than the first content granularity, and wherein the descriptor propagation device propagates the first descriptor without prior data regarding the first descriptor (see figures 1b, 'photo,' which is a descriptor, is the first content granularity and 'person A' and 'person B,' which are also descriptors, are the second content granularities, the arrows pointing from '03' to '01' and '02' are read as propagation, in figures 1a, the descriptor are labeled without using a hierarchy, which reads on 'without prior data', hierarchy is not use until figure 1b). Paek does not disclose a descriptor acceptance device that accepts a first descriptor associated with a first content granularity. Liu discloses a descriptor acceptance device that accepts a first descriptor associated with a first content granularity (figure 2, element 158, accepts descriptors and figure 7 shows steps of how images are annotated, S706, S708, there are a hierarchy, column 6, lines 30-37, the first level of granularity is read as the first granularity). One skilled in the art would include a descriptor acceptance device because to be able to accept and also modify descriptors that are already in the image content, to provide more accurate description of the image content (see Liu abstract).

With regards to claim 3, Liu discloses a repository that stores the first descriptor associated with the first content granularity (figure 2, 142).

With regards to claim 8, see the rationale for claim 1.

With regards to claim 24, Paek discloses propagation device processes a video image along with annotations at the first content granularity and propagates the annotations to the second content granularity (see page 28, lines 22-24).

With regards to claim 25, Paek discloses propagation device processes a video image, including a plurality of regions having the second content granularity, along with annotations at the first content granularity and propagates each of the annotations to one of plurality of regions (see page 28, lines 26-29).

3. Claims 2, 4, 6, 7, 9, 15-17, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paek '467 in view of Liu '860 and Sakoe (US pat no 4,479,236).

With regards to claim 4, see the rationale for claim 1. Paek and Liu do not disclose a mapping function. Sakoe discloses mapping/propagation function (see column 4, lines 26 to 37, the similarity measures maps the distance between vectors A and B). One skilled in the art would include a mapping function because to find the pattern in the database best matches the input pattern, which results in accurate matching.

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With regards to claims 2, 9, 20 and 23, see the rationale for claim 4.

With regards to claim 7, see the rationale for claim 3.

With regards to claims 16 and 17, see the rationale for claim 4.

With regards to claims 6 and 15, Sakoe discloses a second mapping function (see figure 5, 18). One skilled in the art would include a second mapping function because to further determine the total difference between two patterns (see abstract of Sakoe).

4. Claims 10-12, 18, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paek '467 in view of Sakoe '236.

With regards to claims 10-12, 18, 21 and 22, see the rationale for claims 1 and 4.

5. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paek '467 in view of Sakoe '236 as applied 10 further in view of Liu '860.

With regards to claims 13 and 19, see the rationale for claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX LIEW whose telephone number is (571)272-8623 or cell (917)763-1192. The examiner can be reached anytime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C Bella/ Supervisory Patent Examiner, Art Unit 2624

Alex Liew AU2624 8/27/08